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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,897	11/19/2001	William P. Bunton	20206-137 (P01-3699US)	1340

7590 06/15/2005

HEWLETT-PACKARD COMPANY Attn: Bill Streeter
INTELLECTUAL PROPERTY ADMINISTRATION
P.O. BOX 272400
FORT COLLINS, CO 80527-2400

EXAMINER

TRAN, DZUNG D

ART UNIT	PAPER NUMBER
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2638

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,897

Applicant(s)

BUNTON, WILLIAM P.

Examiner

Dzung D. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 6-21 is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (Hereinafter "Cheng") U.S. Patent no. 6,151,336.

As claim 5, Cheng discloses a computer network device and method of alignment a plurality of transmission lanes with a plurality of reception lanes in a data transmission system (Abstract and col. 1, lines 48-52), comprising:

unit 200-A (detailed in fig. 2) for transmitting a plurality of synchronization signal J (control symbols) (col. 3, lines 24-26 and col. 7, line 66) and channel ID (lane identifiers) (col. 7, lines 65-67) on a plurality of sets of the transmission lanes (F1, F2, ..);

time-division multiplexers (230) for time-division multiplexing the transmission lanes (F1, F2,... , FN, fig. 2) within each set of transmission lanes to provide a plurality of time-division multiplexed signals (col. 6, lines 19-24);

wave-division multiplexer (300) wave-division multiplexing the plurality of time-division multiplexed signals to provide a wave-division multiplexed signal (col. 6, lines 24-29);

transmission link (400, fig. 1) for transmitting the wave-division multiplexed signal across a data link (col. 6, lines 31-35);

demultiplexer (500, figs. 1, 3) for demultiplexing the wave division multiplexed signal to reconstruct the time-division multiplexed signals (col. 7, lines 25-32);

time-division demultiplexer (610) for demultiplexing the time-division multiplexed signals onto a plurality of sets of reception lanes (col. 7, lines 34-40);

a control module (660) for:

monitoring one of the reception lanes in each set of reception lanes for receipt of a lane-identifier;

upon receipt of a lane identifier, comparing the received lane identifier with the identity of the monitored reception lane (col. 7, line 59 - col. 8, line 8);

Wherein, upon start up, the data (D1, D2, D3, ..., DN of figure 2) is assigned to the transmission lanes (F1, F2, F3, ..., FN of figure 2) without regard to the lane identifier (col. 6, lines 1-24).

Cheng does not clearly teach about rotating a lane assignment within the set of reception lanes containing the monitored reception lane if the received lane identifier does not match an identity of the monitored reception lane. However, the rotation step, for rotating a lane assignment within the set of reception lanes, is just only switching a received lane to the right lane (matching ID). In case of the channel ID is not match

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(Cheng, col. 7, line 63 - col. 8, line 1), then the demultiplexing process skips a channel a single time, wherein, the ID will be checked and compared again until the channel ID is match (col. 8, lines 2-8). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to perform the skipping a single time (rotating) a lane assignment within the set of reception lanes in order to lead the received lane to another reception lane wherein the ID channel is match. One would have motivated for skipping or rotating a lane within the set of reception lanes in order for reducing the processing time at the demultiplexer, in turns, increasing the communication speed.

Allowable Subject Matter

3. Claims 1-4, 6-21 are allowed.

Response to Arguments

4. Applicant's arguments filed on 01/24/2005 have been fully considered but they are not persuasive.

A Rejection of claim 5 under *USC § 103(a)* as *being anticipated* by Cheng US patent no. 6,151,336.

Applicant argues that Cheng reference does not discloses or suggest upon start up, the data is assigned to the transmission lanes without regard to the lane

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identifier. However Cheng clearly discloses upon start up, the data (D1, D2, D3, ..., DN of figure 2) is assigned to the transmission lanes (F1, F2, F3, ..., FN of figure 2) without regard to the lane identifier (col. 6, lines 1-24).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran
06/05/2005



KENNETH VANDERPUYE
PRIMARY EXAMINER